

Yukon Influenza Surveillance Report

Influenza Season 2009-2010

Summary Report

FluWatch Weeks 33-34 (Aug 15 - Aug 28, 2010)

***All data are provisional and subject to change as information is received

FluWatch Weeks 33-34

Newsletter 18

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Report Highlights

This surveillance report, produced by YCDC, summarizes influenza activity in the Yukon for the 2009-2010 season. This report captures the last two weeks of the 2009-2010 influenza season weeks 33-34 (Aug 15- Aug 28, 2010). The 2010-2011 influenza surveillance season begins on week 35 (August 29 - Sept 4th, 2010).

2009-2010 FluWatch Weeks Calendar: <http://www.phac-aspc.gc.ca/fluwatch/09-10/09-10-cal-eng.php>

During weeks 33-34, surveillance indicators continue to demonstrate low to no levels of influenza

Pandemic H1N1 (pH1N1) Severe Outcomes

Hospitalizations

There have been no hospitalizations since week 46 (Nov 15 - Nov 21, 2009).

Since October 20th, there have been 15 pH1N1 Yukon residents admitted to hospital. Among hospitalized cases 12 of the 15 had at least one risk factor for influenza complications. 3 out of 15 hospitalized cases have been admitted to ICU.

Deaths

There have been no deaths reported since week 46 (Nov 15 - Nov 21).

Yukon has had three deaths where pH1N1 was detected; pH1N1 played a direct role in the death in two of the three individuals. The first death occurred during week 44, in a female child with underlying health conditions. The second death occurred during week 46 in an adult female, underlying health conditions were not present. A third death was announced December 9th, 2009. The death occurred in an infant who died early November; however, pH1N1 infection is thought to be coincidental and not a contributing factor in the death. A complete coroner's investigation is pending.

Link to Yukon Health and Social Services Release: http://www.hss.gov.yk.ca/news/id_213/

FluWatch Reporting

Based on FluWatch activity level definitions, Yukon has reported the following activity levels:

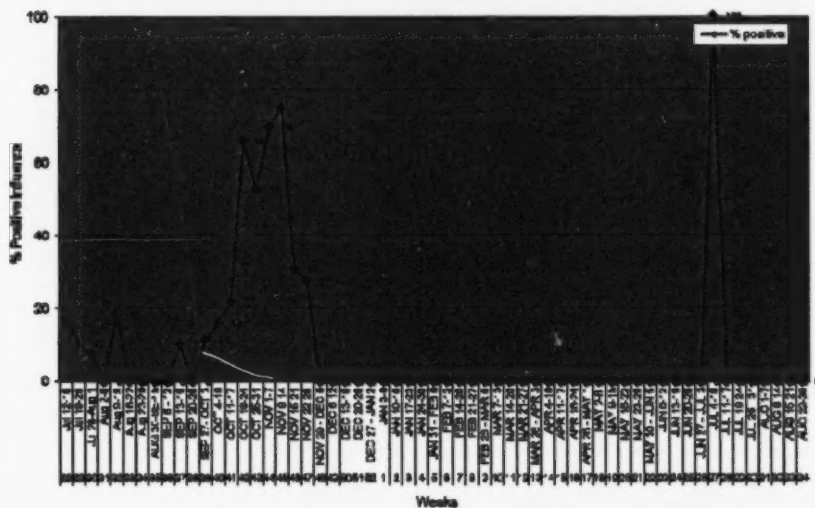
FluWatch activity level definition: <http://www.phac-aspc.gc.ca/fluwatch/09-10/def09-10-eng.php>

Weeks 33-34	No activity: no laboratory-confirmed influenza detections during the past four weeks, however, sporadically occurring ILI may be reported
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Laboratory Reports

Since week 47, one positive influenza result (seasonal influenza A) was identified from week 27.

Percentage of Respiratory Specimens (Submitted for testing in Yukon) Diagnosed Positive for Influenza during weeks 33-34



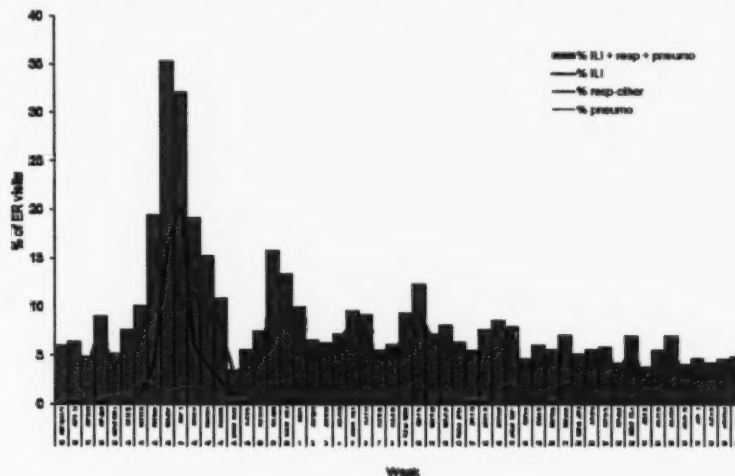
Communities with Laboratory Confirmed pH1N1

Cumulative laboratory information indicates that since April, 2009 Whitehorse and 9 out of 13 surrounding communities have had confirmed pH1N1 case reports.

Whitehorse General Hospital Emergency Visits

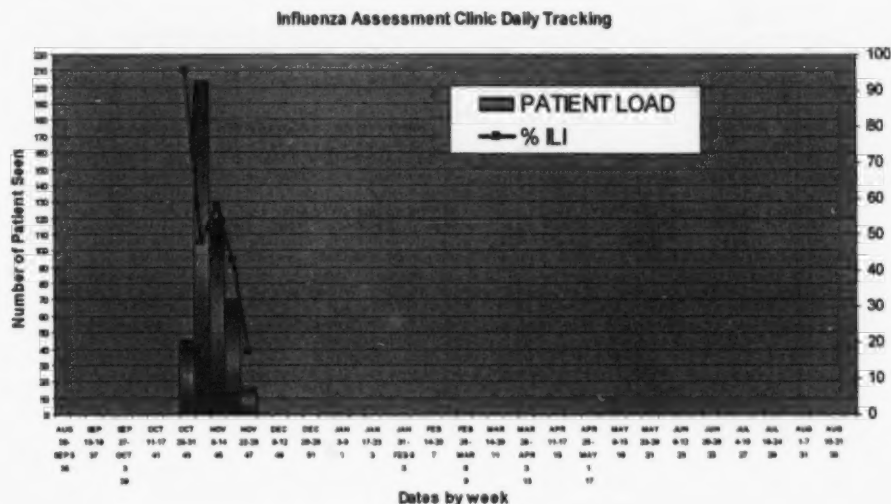
During weeks 33-34 the proportion of presentations to the WGH emergency department for respiratory symptoms identified as ILI has remained low.

Percent of WGH ER visits with influenza-like illness (ILI), other respiratory symptoms, or pneumonia by week



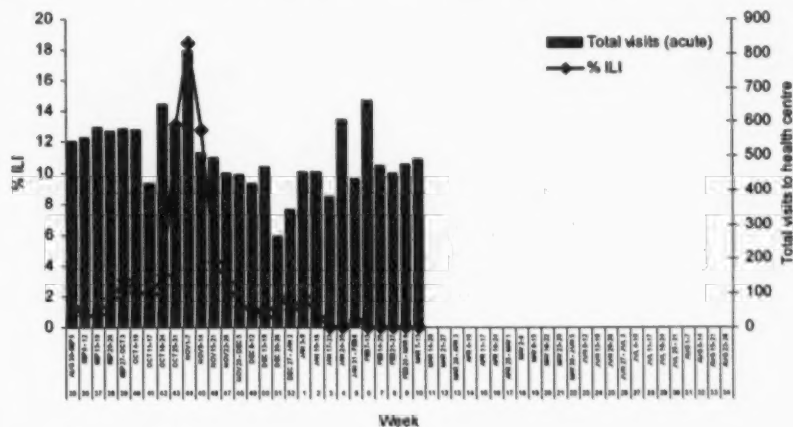
Influenza Assessment Clinic

This downtown Whitehorse clinic opened its doors on October 30th, 2009. The following graph depicts patient volume from October 30th to November 27, 2009. The clinic's last day of operation was November 27th, 2009.



Community Health Centres

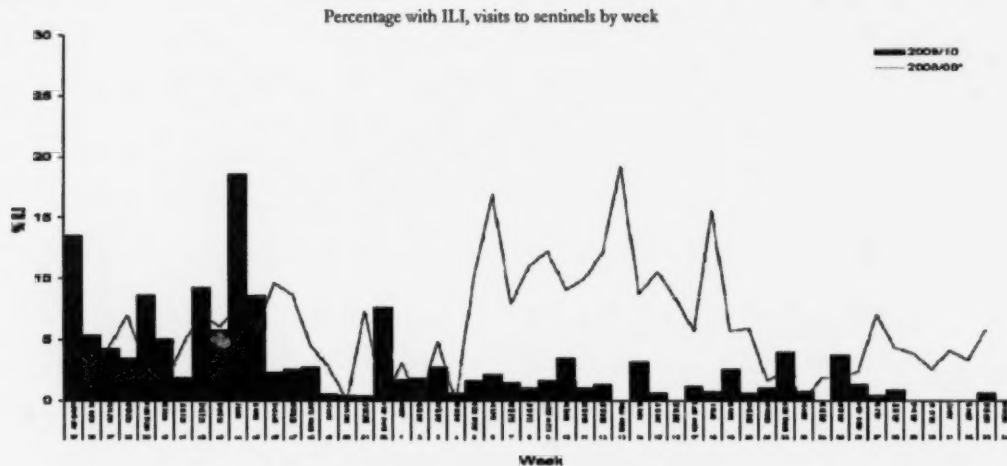
Influenza-related visits to Community Health Centres (rural Yukon) increased substantially during weeks 42-44 while decreasing activity was seen from week 45 on. From week 48 on, the proportion of ILI related visits have returned to similar levels experienced in week 42 and earlier. (YCDC Data entry ongoing)



*Data provided from Community Nursing

Sentinel physicians/sites

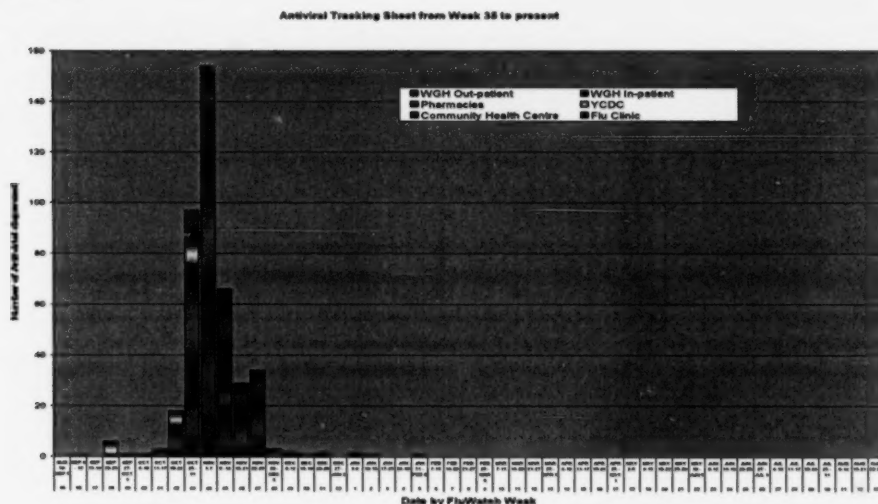
In week 33, 0.6% of visits to sentinel sites (physicians/Community Health Centres) were for ILI. During week 34, there were no visits made for ILI to sentinel sites. During the 2008/09 season, an average of five sentinel reports were received each week. A new recruitment of sentinel physicians and sites occurred in July 2009. There are presently 18 sentinel physicians/sites across the territory; during weeks 33-34 an average 42% of sentinels reported. Yukon's sentinel surveillance system is comprised of all Community Health Centre's and participating physicians. (FluWatch Sentinel Surveillance Information <http://www.phac-aspc.gc.ca/fluwatch/sent-eng.php>)



*2008/09 weeks are slightly different than those shown (following the Sun-Sat weekly pattern).

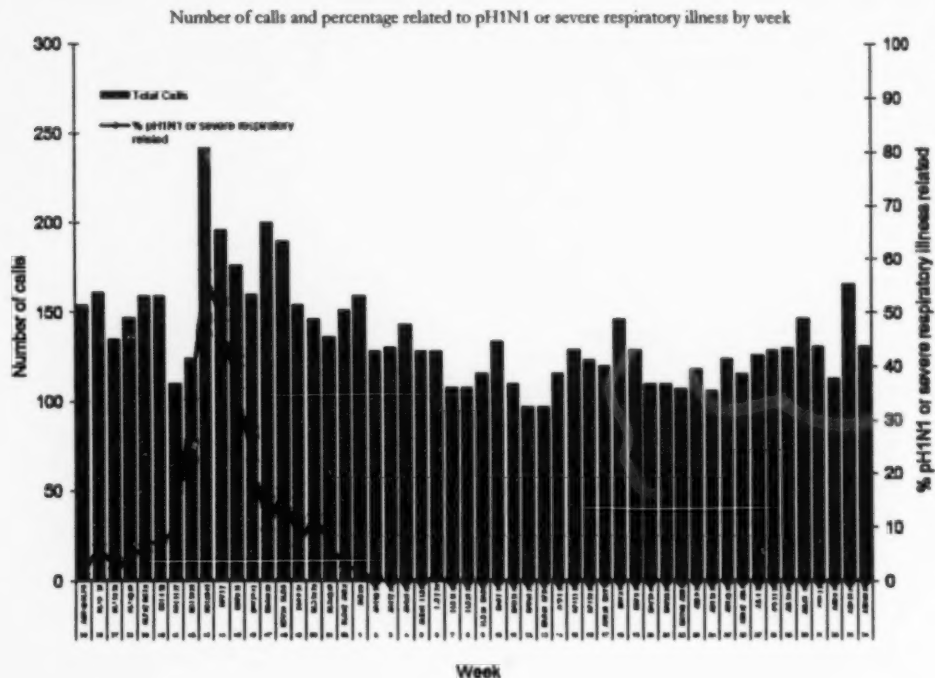
Antiviral Prescriptions/Dispensing

Antiviral prescriptions have decreased since week 45. Antiviral have not been distributed since week 5 (Jan 31 - Feb 6, 2010)



HealthLink 811

The graph below shows the percentage of calls related to Influenza A pH1N1 or severe respiratory illness.

**Outbreaks**

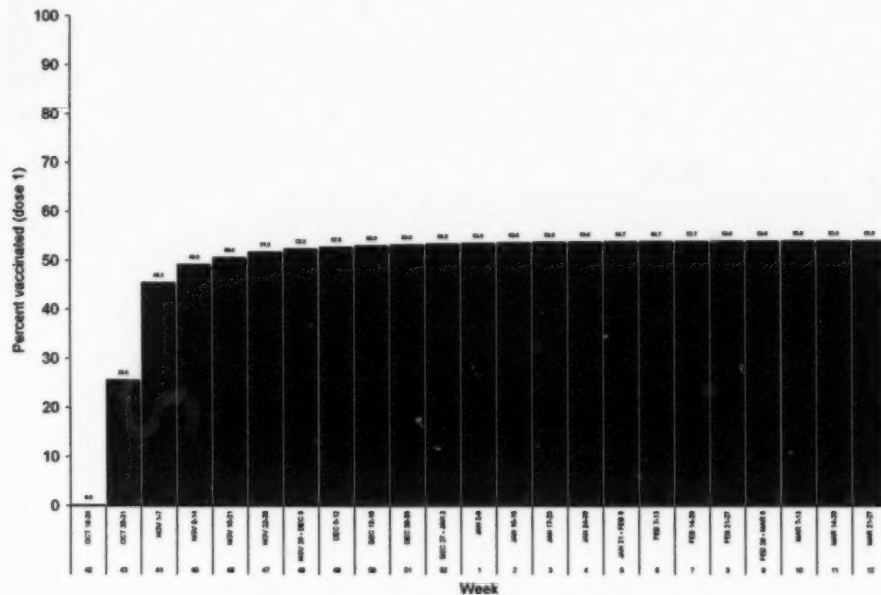
No facility outbreaks have been reported since week 43 (Oct 25 - 31, 2009). On October 29th, 2009 (during week 43) YCDC was notified of an influenza outbreak within the Whitehorse Correctional facility. The outbreak was contained to fewer than 10 residents who developed symptoms during their stay at the facility or who exhibited symptoms of influenza upon admission. Causative organism of the outbreak was identified as pH1N1. This outbreak was declared over on November 16th, 2009.

Schools

There have been no reports of high absenteeism in schools since week 45 (Nov 8 - 14, 2009).

Immunization

The percentage of the population vaccinated with one dose against influenza A pH1N1 reached 53.8% in week 8. The age groups with the highest proportions vaccinated (dose 1) are those 6 months to 4 years and those 65 year or older. Vaccine administration is on going, however, due to low volume of continued vaccine uptake, this section will no longer be updated on a monthly basis.



Proportion of population vaccinated, dose 1, by week in the Yukon Territory

Age group	% Vaccinated
6 mo - 4 years	70.3
5-18 years	56.3
19-29 years	36.5
30-39 years	51.8
40-64 years	55.6
65+ years	68.9
TOTAL	53.8

*Data provided by the Community Nursing Vaccination Program.

Adverse Events Following Immunization

Of 18 400, doses administered from October 26 to March 27, 2010, 33 adverse events following immunization have been reported. The types of reports include both local and allergic reactions. None of the events fit the criteria for serious adverse events, and none required hospitalization.

Obtained from: FluWatch – Public Health Agency of Canada

August 15 to August 28, 2010 (Weeks 33 & 34)

http://www.phac-aspc.gc.ca/fluwatch/09-10/w34_10/index-eng.php

Summary of FluWatch Findings for the Week ending August 28, 2010

Overall influenza activity in Canada remained low with most of the influenza surveillance regions having reported no activity and no influenza outbreaks since March 2010. However, the proportion of positive influenza specimens reported during week 34 (0.82%) represents the highest proportion observed since week 1 of 2010 (1.34%).

The combined proportion of positive influenza specimens for the two-week period was 0.46% (7/1,522) which is similar to what is usually observed at this time of the year. Of the seven positive specimens, four specimens were reported as influenza A/H3N2 and three were reported as untyped influenza A. BC, AB, ON and QC were the only provinces to report positive influenza specimens during those reporting weeks.

Worldwide, H1N1 2009 virus transmission remained most intense in parts of India and in parts of the temperate southern hemisphere, particularly New Zealand and more recently in Australia.

Canadian situation

Paediatric Influenza Hospitalizations and Deaths

In weeks 33-34, no laboratory-confirmed influenza-associated paediatric (18 years of age and under) hospitalizations were reported through the Immunization Monitoring Program Active (IMPACT) network. Since the beginning of the 2009-2010 influenza season (30 August, 2009), 952 hospitalizations have been reported, of which 97.7% were due to pandemic H1N1 2009. The last hospitalized case was reported during week 15 with pandemic H1N1 2009. Please note that delays in the reporting of data may cause data to change retrospectively.

Adult Influenza Hospitalizations and Deaths

During weeks 33 and 34, no new laboratory-confirmed influenza-associated adult (16 years of age and older) hospitalizations were reported through the Canadian Nosocomial Infection Surveillance Program (CNISP) from 10 reporting sites in week 33 and 7 in week 34. From November 22, 2009 to May 22, 2010, 57 laboratory-confirmed influenza cases among hospitalized adults (16 years of age and older) were reported through the Canadian Nosocomial Infection Surveillance Program (CNISP) sentinel sites. The last hospitalized case was reported during week 1 with pandemic H1N1 2009. Please note the total number of CNISP reporting sites fluctuates weekly and most of the reporting sites started surveillance in late fall 2009.

Sale of antivirals (AV)

During weeks 33 and 34, little change in antiviral prescription sales were observed among provinces and territories. Daily and weekly antiviral data at the Health Region level demonstrated low antiviral prescription rates among all Health Regions for the report weeks. All the antivirals sold from participating retail pharmacy chains and stores during the past two weeks were Tamiflu. Respiratory-related over the counter transactions appear to be increasing in most provinces and territories. This is consistent with trends at this time in 2009.

Antigenic Characterization

Since September 1, 2009, the National Microbiology Laboratory (NML) has antigenically characterized 858 (98.1%) influenza A/H1N1, 10 (1.1%) influenza A/H3N2 and 7 (0.8%) influenza B viruses that were received from provincial laboratories. Of the 858 pandemic H1N1 2009 viruses characterized, 855 (99.7%) were antigenically related to A/California/7/2009, which is the pandemic reference virus selected by WHO for the pandemic H1N1 2009 vaccine and three (0.3%) were A/Brisbane/59/2007-like. Four viruses (0.5%) tested showed reduced titer with antisera produced against A/California/7/09. Of the 10 influenza A/H3N2 viruses characterized, two were related to A/Brisbane/10/07 (2009-10 vaccine) and eight viruses were antigenically related to A/Perth/16/09 (2010-2011 Northern Hemisphere vaccine). Of the 7 influenza B viruses

characterized, 5 were antigenically related to B/Brisbane/60/08 (2009-10 vaccine), one was antigenically similar to B/Malaysia/2506/2004 and one was related to the previous vaccine virus B/Florida/4/2006.

Antiviral Resistance

Since August 30, 2009, 12 cases of oseltamivir resistant pandemic H1N1 2009 were reported to date in Canada while one was reported in the 2008-2009 influenza season. The last two cases were reported during week 5. All resistant cases were associated with oseltamivir treatment or prophylaxis.

International influenza update

Global information

WHO: Worldwide, H1N1 2009 virus transmission remained most intense in parts of India and in parts of the temperate southern hemisphere, particularly New Zealand and more recently in Australia.
http://www.who.int/csr/don/2010_08_27/en/index.html

Geographic update

Southern hemisphere

Australia: In Australia, the levels of influenza-like illness (ILI) in the community continued to show signs of increasing. Although the rate in 2010 has had a slight upward trend since the beginning of the year, the consultation rate was still below previous years and has remained relatively stable over the past few weeks. Of note, an online influenza surveillance system that tracks the rate of ILI in the community found that recent increases in the rate of ILI have been among persons who were unvaccinated against H1N1 2009 virus. The notifications of laboratory-confirmed influenza cases continue to increase this week; there have been 362 laboratory-confirmed notifications of influenza during week 33, including 248 (68.5%) pandemic H1N1 2009 cases.
[http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/ozflu2010-jul-sep-pdf-cnt.htm/\\$File/ozflu-no33-2010.pdf](http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/ozflu2010-jul-sep-pdf-cnt.htm/$File/ozflu-no33-2010.pdf), http://www.who.int/csr/don/2010_08_27/en/index.html

New Zealand: In New Zealand, H1N1 2009 virus transmission remained active and locally intense, particularly in areas that were less affected during last winter's first pandemic wave. As of the fourth week of August 2010, the overall national weekly rate of consultations for ILI continued to increase above the seasonal baseline for the fifth consecutive week, however, the rate of increase in ILI consultations appears have slowed during the most recent reporting week, suggesting that peak epidemic activity may occur in the weeks ahead. The vast majority of influenza virus detections during the current epidemic period have been H1N1 2009.
http://www.surv.csr.cri.nz/PDF_surveillance/Virology/FluWeekRpt/2010/FluWeekRpt201034.pdf,
http://www.who.int/csr/don/2010_08_27/en/index.html

Northern hemisphere

India: In India, the current national influenza H1N1 2009 epidemic, which first began during late May and June 2010 in the southern state of Kerala (co-incident with start of the monsoon rains), continues to remain regionally intense in several western and southern states as well as the in the capital. The western state of Maharashtra, which to date, has detected the highest numbers of cases (including fatal cases), continues to record the most intense influenza H1N1 2009 activity, however, the rate of increase in the numbers of new cases reported per week appears to have slowed during mid-August 2010, suggesting that current epidemic activity may be peaking. Since late July 2010, the vast majority of influenza virus detections have been H1N1 2009.
http://www.who.int/csr/don/2010_08_27/en/index.html

United States: No further influenza surveillance reports will be published by the CDC for the 2009-2010 influenza season (last report was in week 20). The next report will be for week 40 (week ending October 9, 2010) during the 2010-2011 influenza season.
<http://www.cdc.gov/flu/weekly/index.htm>

Europe: During weeks 32 and 33, epidemiological indicators did not show any influenza activity in 17 reporting countries. A few influenza A and B viruses were sporadically detected in non-sentinel specimens during weeks 32-33/2010.

http://ecdc.europa.eu/en/publications/Publications/100827_SUR_Biweekly_Influenza_Surveillance_Overview.pdf

Pandemic H1N1 Influenza Web Sites

Yukon H&SS	www.hss.gov.yk.ca/
PHAC:	www.phac-aspc.gc.ca/alert-alerte/swine_200904-eng.php
BCCDC:	www.bccdc.ca/dis-cond/a-z/h/HumanSwineFlu/default.htm
BCCDC:	www.health.gov.bc.ca/pandemic/response/index.html
US CDC:	www.cdc.gov/swineflu/index.htm
WHO:	www.who.int/csr/disease/swineflu/en/index.html

Acronyms

ILI:	Influenza-Like Illness
pH1N1:	Pandemic H1N1 influenza or swine origin influenza
WHO:	World Health Organization



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